FIG. 1

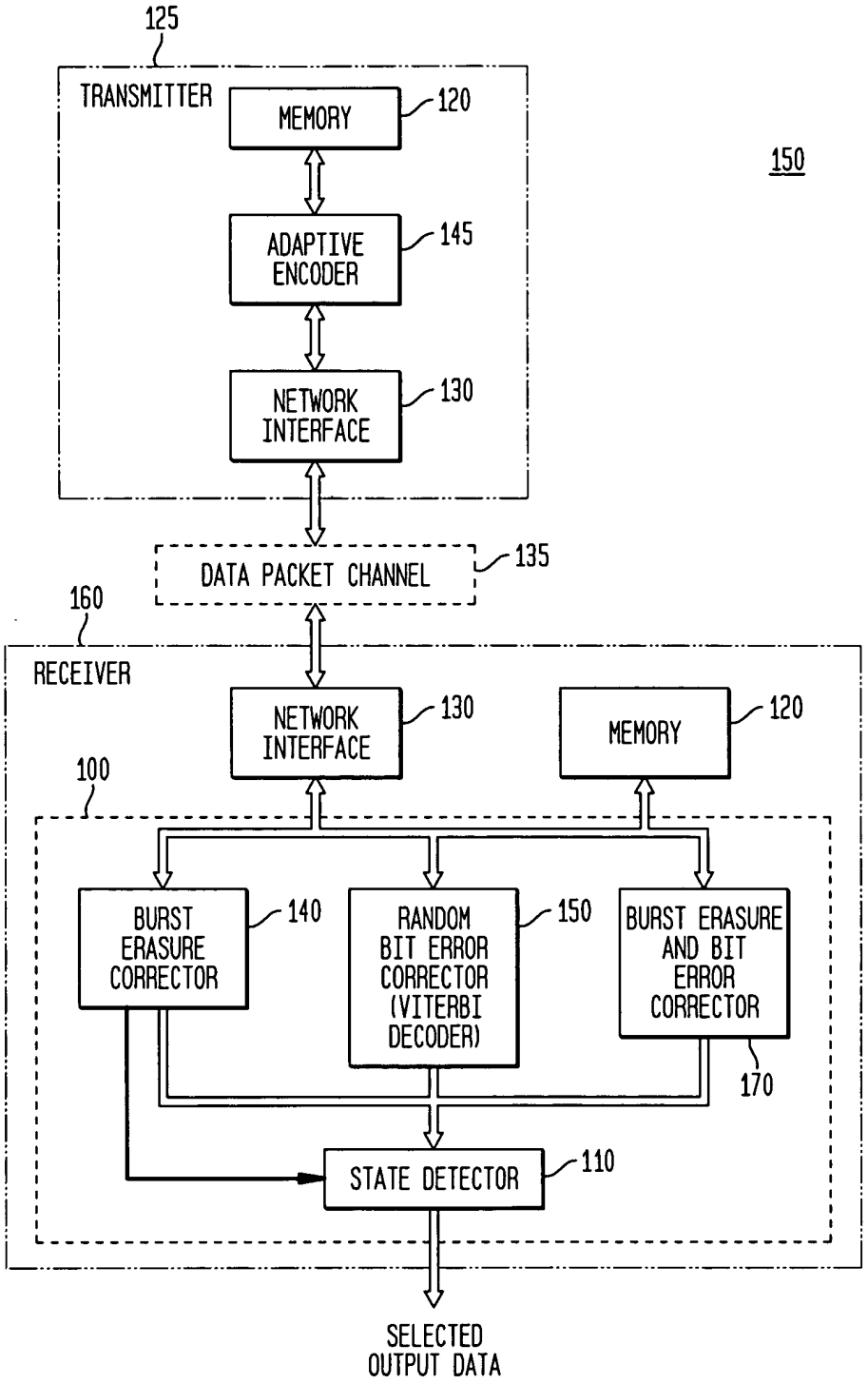


FIG. 2

$\vec{y}[i]=$	$x[i]$	$x[i-3]$
$\vec{y}[i+1]=$	$x[i+1]$	$x[i-2]$
$\vec{y}[i+2]=$	$x[i+2]$	$x[i-1]$
$\vec{y}[i+3]=$	$x[i+3]$	$x[i]$
$\vec{y}[i+4]=$	$x[i+4]$	$x[i+1]$
$\vec{y}[i+5]=$	$x[i+5]$	$x[i+2]$
$\vec{y}[i+6]=$	$x[i+6]$	$x[i+3]$
$\vec{y}[i+7]=$	$x[i+7]$	$x[i+4]$

FIG. 3

$\vec{y}[0]=$	$x_0[0]$	$x_1[0]$	$x_2[0]$	0
$\vec{y}[1]=$	$x_0[1]$	$x_1[1]$	$x_2[1]$	$x_0[0]$
$\vec{y}[2]=$	$x_0[2]$	$x_1[2]$	$x_2[2]$	$x_0[1] \oplus x_1[0]$
$\vec{y}[3]=$	$x_0[3]$	$x_1[3]$	$x_2[3]$	$x_0[2] \oplus x_1[1] \oplus x_2[0]$
$\vec{y}[4]=$	$x_0[4]$	$x_1[4]$	$x_2[4]$	$x_0[3] \oplus x_1[2] \oplus x_2[1]$

FIG. 4

	$\vec{y}[0]=$	$x_0[0]$	$x_1[0]$	$x_2[0]$	0
	$\vec{y}[1]=$	$x_0[1]$	$x_1[1]$	$x_2[1]$	$x_0[0]$
	$\vec{y}[2]=$	$x_0[2]$	$x_1[2]$	$x_2[2]$	$x_0[1] \oplus x_1[0]$
	$\vec{y}[3]=$	$x_0[3]$	$x_1[3]$	$x_2[3]$	$x_0[2] \oplus x_1[1] \oplus x_2[0]$
SYMBOL ERASED →	$\vec{y}[4]=$	$x_0[4]$	$x_1[4]$	$x_2[4]$	$x_0[3] \oplus x_1[2] \oplus x_2[1]$
DECODE $x_0[4]$ HERE →	$\vec{y}[5]=$	$x_0[5]$	$x_1[5]$	$x_2[5]$	$x_0[4] \oplus x_1[3] \oplus x_2[2]$
DECODE $x_1[4]$ HERE →	$\vec{y}[6]=$	$x_0[6]$	$x_1[6]$	$x_2[6]$	$x_0[5] \oplus x_1[4] \oplus x_2[3]$
DECODE $x_2[4]$ HERE →	$\vec{y}[7]=$	$x_0[7]$	$x_1[7]$	$x_2[7]$	$x_0[6] \oplus x_1[5] \oplus x_2[4]$

FIG. 5

	$\vec{y}[0]=$	$x_0[0]$	$x_1[0]$	$x_2[0]$	0
	$\vec{y}[1]=$	$x_0[1]$	$x_1[1]$	$x_2[1]$	0
	$\vec{y}[2]=$	$x_0[2]$	$x_1[2]$	$x_2[2]$	$x_0[0]$
	$\vec{y}[3]=$	$x_0[3]$	$x_1[3]$	$x_2[3]$	$x_0[1]$
	$\vec{y}[4]=$	$x_0[4]$	$x_1[4]$	$x_2[4]$	$x_0[2] \oplus x_1[0]$
	$\vec{y}[5]=$	$x_0[5]$	$x_1[5]$	$x_2[5]$	$x_0[3] \oplus x_1[1]$
SYMBOL ERASED →	$\vec{y}[6]=$	$x_0[6]$	$x_1[6]$	$x_2[6]$	$x_0[4] \oplus x_1[2] \oplus x_2[0]$
SYMBOL ERASED →	$\vec{y}[7]=$	$x_0[7]$	$x_1[7]$	$x_2[7]$	$x_0[5] \oplus x_1[3] \oplus x_2[1]$
RECOVER $x_0[6]$ HERE →	$\vec{y}[8]=$	$x_0[8]$	$x_1[8]$	$x_2[8]$	$x_0[6] \oplus x_1[4] \oplus x_2[2]$
RECOVER $x_0[7]$ HERE →	$\vec{y}[9]=$	$x_0[9]$	$x_1[9]$	$x_2[9]$	$x_0[7] \oplus x_1[5] \oplus x_2[3]$
RECOVER $x_1[6]$ HERE →	$\vec{y}[10]=$	$x_0[10]$	$x_1[10]$	$x_2[10]$	$x_0[8] \oplus x_1[6] \oplus x_2[4]$
RECOVER $x_1[7]$ HERE →	$\vec{y}[11]=$	$x_0[11]$	$x_1[11]$	$x_2[11]$	$x_0[9] \oplus x_1[7] \oplus x_2[5]$
RECOVER $x_2[6]$ HERE →	$\vec{y}[12]=$	$x_0[12]$	$x_1[12]$	$x_2[12]$	$x_0[10] \oplus x_1[8] \oplus x_2[6]$
RECOVER $x_2[7]$ HERE →	$\vec{y}[13]=$	$x_0[13]$	$x_1[13]$	$x_2[13]$	$x_0[11] \oplus x_1[9] \oplus x_2[7]$

FIG. 6

	$\vec{y}[0]=$	$x_0[0]$	$x_1[0]$	$x_2[0]$	0
	$\vec{y}[1]=$	$x_0[1]$	$x_1[1]$	$x_2[1]$	$P\{x_0[0],0,0,0\}$
	$\vec{y}[2]=$	$x_0[2]$	$x_1[2]$	$x_2[2]$	$P\{x_0[1],x_0[0],0,0\}$
SYMBOL ERASED →	$\vec{y}[3]=$	$x_0[3]$	$x_1[3]$	$x_2[3]$	$P\{x_0[2],x_0[1],x_1[0],x_2[0]\}$
SYMBOL ERASED →	$\vec{y}[4]=$	$x_0[4]$	$x_1[4]$	$x_2[4]$	$P\{x_0[3],x_0[2],x_1[1],x_2[1]\}$
RECOVER $x_0[3]$, $x_0[4]$ HERE →	$\vec{y}[5]=$	$x_0[5]$	$x_1[5]$	$x_2[5]$	$P\{x_0[4],x_0[3],x_1[2],x_2[2]\}$
RECOVER $x_1[3]$, $x_2[3]$ HERE →	$\vec{y}[6]=$	$x_0[6]$	$x_1[6]$	$x_2[6]$	$P\{x_0[5],x_0[4],x_1[3],x_2[3]\}$
RECOVER $x_1[4]$, $x_2[4]$ HERE →	$\vec{y}[7]=$	$x_0[7]$	$x_1[7]$	$x_2[7]$	$P\{x_0[6],x_0[5],x_1[4],x_2[4]\}$

FIG. 7

$\vec{y}[i]=$	$x[i]$	$x[i-3] \oplus x[i-4] \oplus x[i-5]$
$\vec{y}[i+1]=$	$x[i+1]$	$x[i-2] \oplus x[i-3] \oplus x[i-4]$
$\vec{y}[i+2]=$	$x[i+2]$	$x[i-1] \oplus x[i-2] \oplus x[i-3]$
$\vec{y}[i+3]=$	$x[i+3]$	$x[i] \oplus x[i-1] \oplus x[i-2]$
$\vec{y}[i+4]=$	$x[i+4]$	$x[i+1] \oplus x[i] \oplus x[i-1]$
$\vec{y}[i+5]=$	$x[i+5]$	$x[i+2] \oplus x[i+1] \oplus x[i]$
$\vec{y}[i+6]=$	$x[i+6]$	$x[i+3] \oplus x[i+2] \oplus x[i+1]$
$\vec{y}[i+7]=$	$x[i+7]$	$x[i+4] \oplus x[i+3] \oplus x[i+2]$

FIG. 8

$$x[i-1] = y_0[i-1]$$

$$x[i] = y_0[i]$$

$$x[i+1] = y_1[i+4] \oplus x[i] \oplus x[i-1]$$

$$x[i+2] = y_1[i+5] \oplus x[i+1] \oplus x[i]$$

$$x[i+3] = y_1[i+6] \oplus x[i+2] \oplus x[i+1]$$

FIG. 9

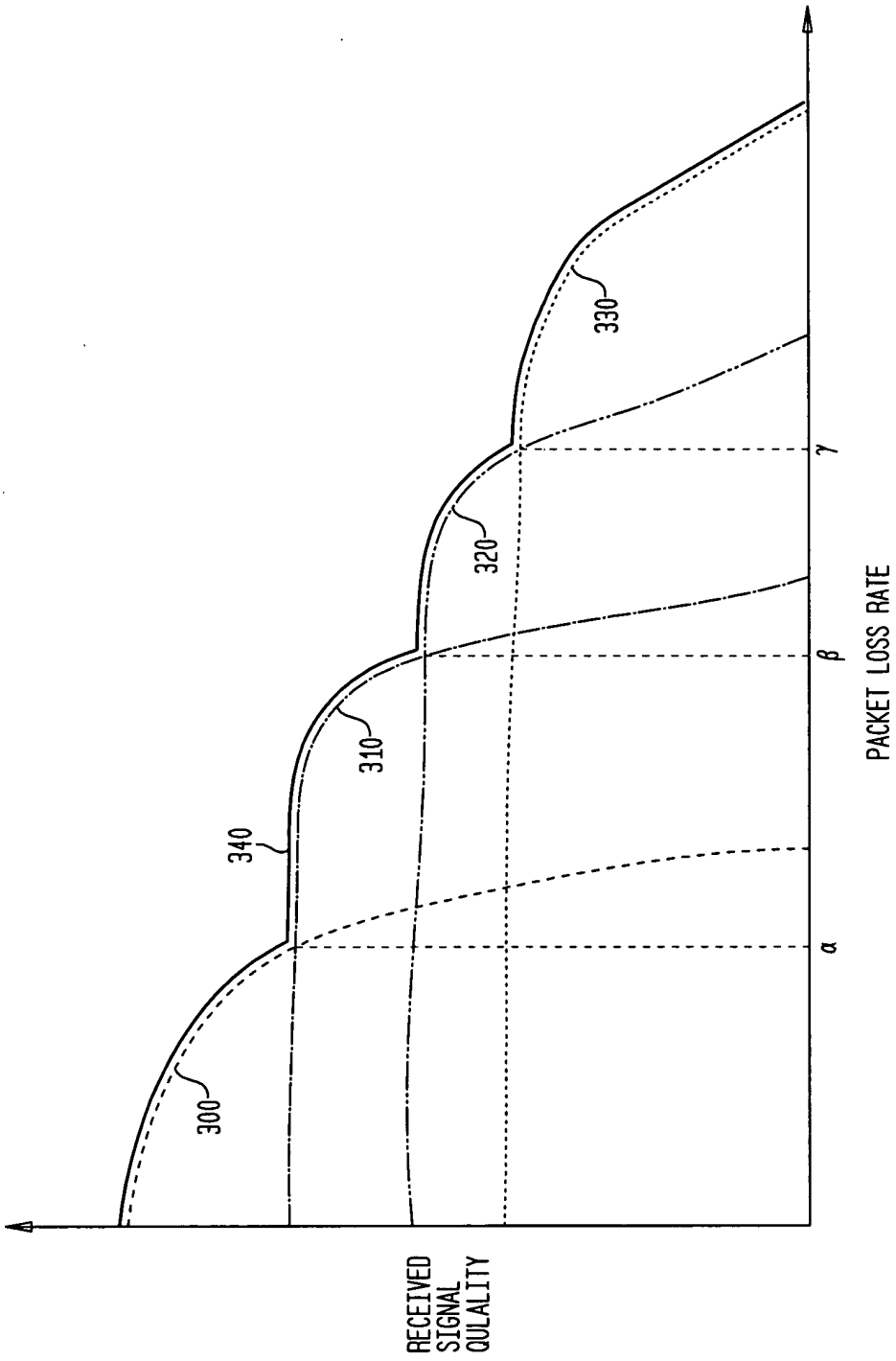
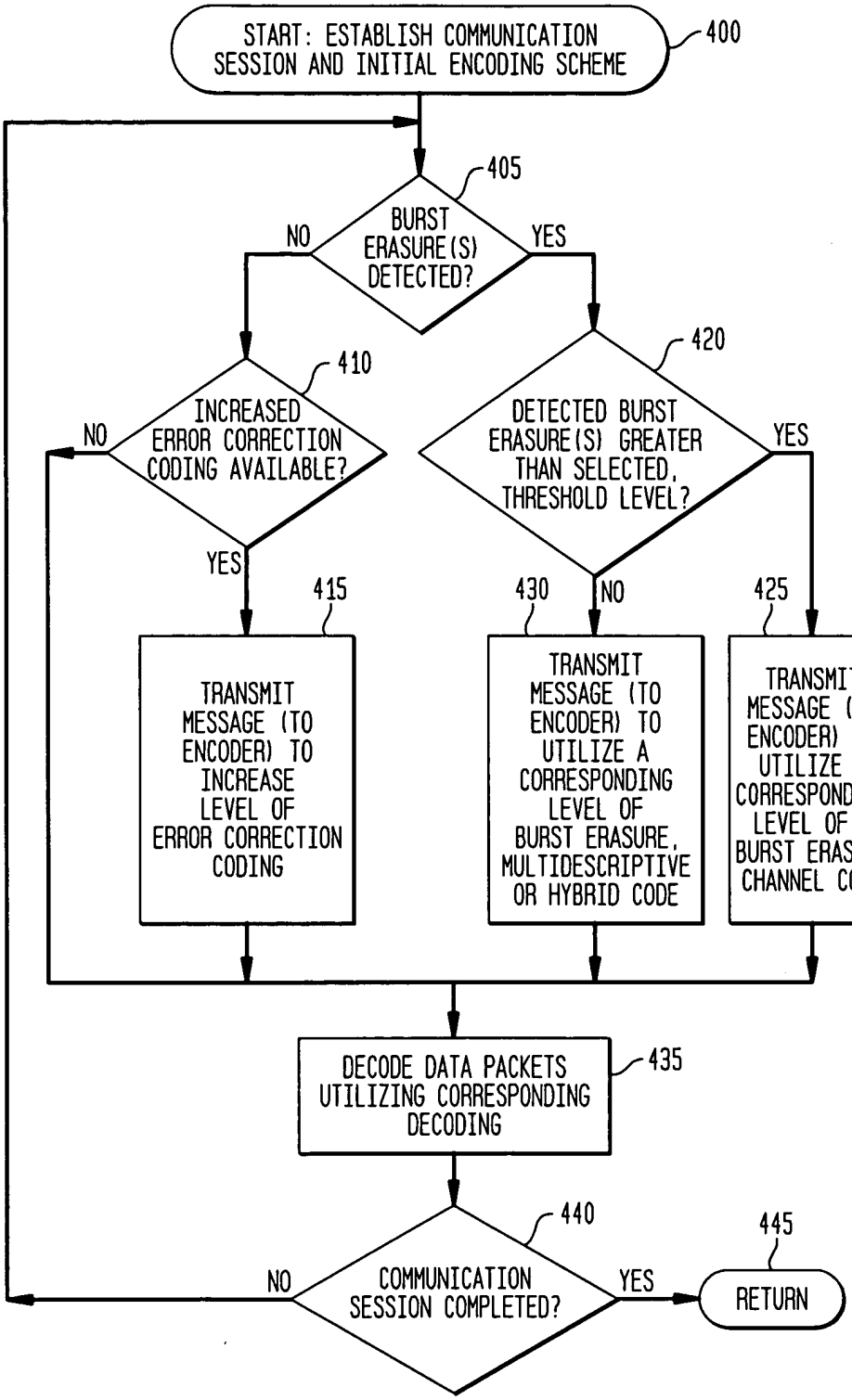

300
340
310
320
330
α
β
γ
PACKET LOSS RATE
RECEIVED SIGNAL QULALITY

FIG. 10


START: ESTABLISH COMMUNICATION SESSION AND INITIAL ENCODING SCHEME
400
405
BURST ERASURE(S) DETECTED?
NO
YES
410
INCREASED ERROR CORRECTION CODING AVAILABLE?
NO
YES
420
DETECTED BURST ERASURE(S) GREATER THAN SELECTED, THRESHOLD LEVEL?
YES
NO
415
TRANSMIT MESSAGE (TO ENCODER) TO INCREASE LEVEL OF ERROR CORRECTION CODING
430
TRANSMIT MESSAGE (TO ENCODER) TO UTILIZE A CORRESPONDING LEVEL OF BURST ERASURE, MULTIDESCRIPTIVE OR HYBRID CODE
425
TRANSMIT MESSAGE (TO ENCODER) TO UTILIZE A CORRESPONDING LEVEL OF A BURST ERASURE CHANNEL CODE
DECODE DATA PACKETS UTILIZING CORRESPONDING DECODING
435
440
COMMUNICATION SESSION COMPLETED?
NO
YES
445
RETURN